

Different paths could lead to autonomous cars

March 3 2016, by David Mchugh



The Mercedes Concept Car is shown during the press day at the 86th International Motor Show in Geneva, Switzerland, Tuesday, March 1, 2016. The Motor Show will open its gates to the public from March 3 to 13, presenting more than 200 exhibitors and more than 120 world and European premieres. (Sandro Campardo/Keystone via AP)

Cars that drive themselves would mean a revolution in how people get around.

But they might arrive just as much by evolution, with everyday cars getting gradually smarter, as by sudden shifts to fully self-driving vehicles.

Autonomous driving—and its potential for sweeping change—was much on the minds of top auto executives at the Geneva International Motor Show.

The exhibit space in Geneva was mostly used for the show's primary purpose: showing off product to the news media and the public in order to boost sales. The display stands were dominated by expensive sports and luxury cars for the rich and new SUVs for more middle-class buyers.

But the future beyond the upcoming model year was very much a topic of discussion, if less visible on the display stands. Executives think that cars that drive themselves at least part of the time may be upon us by the end of this decade. Technology such as autonomous driving by cars equipped with cameras and radar sensors could blend with Internet connections and apps. For instance, a car could be ordered for a few hours through an app and drive itself to the customer.



Swiss federal Councillor Alain Berset, left, sits in a Mercedes car shown by Marcel Guerry, CEO of Mercedes-Benz Switzerland, right, during the opening of the 86th Geneva International Motor Show in Geneva, Switzerland, Thursday, March 3, 2016. The Motor Show will open its gates to the public from 3rd to 13th March presenting more than 200 exhibitors and more than 120 world and European premieres. (Martial Trezzini/Keystone via AP)

Google, meanwhile, is testing completely autonomous cars on streets in Mountain View, California, Austin, Texas, and Kirkland, Washington.

Daimler CEO Dieter Zetsche said his company sees "two roads to full autonomy, one being the more evolutionary one where basically more and more assistance systems kind of automatically lead to a [fully autonomous car](#)."

"The other one is more revolutionary ... where first in restricted areas you have fully autonomous cars and over time you expand the area

where you can do that," he said. "And I would say in restricted areas you can see fully autonomous cars in the latter path around the turn of the decade."

Some vehicles at the Geneva show made the case for evolution. The Mercedes-Benz E-Class luxury sedan from Daimler AG already offers wide-ranging, optional driver assistance technology. The latest version of the car can avoid collisions at intersections by recognizing crossing traffic and braking. It can help drivers fight crosswinds, automatically brake for pedestrians, warn drivers if they're getting drowsy, and park itself. It can assist avoidance maneuvering, first by helping the driver steer and then by bringing the car back onto a straight path in a controlled way afterward.



The Opel Karl car is shown during the 86th Geneva International Motor Show in Geneva, Switzerland, on the first public day Thursday, March 3, 2016. The Motor Show will open its gates to the public from 3rd to 13th March presenting

more than 200 exhibitors and more than 120 world and European premieres.
(Cyril Zingaro/Keystone via AP)

Nissan says its Qashqai crossover SUV—that is, a sport-utility with some car-like features—will be equipped with what the company calls "stage one" autonomous driving technology that lets it drive itself in single-lane heavy traffic conditions on freeways. Nissan says it will have a full range of vehicles with autonomous technology by 2020 "on mainstream, mass-market cars at affordable prices."

Nissan also showed off its IDS, for intelligent driving system, concept car, with a steering wheel that retracts when not needed.

Car companies are determined that they—not tech companies such as Google or Apple or a new entry such as ride-sharing service Uber—will provide the technology and reap the profits. They don't want to play the role of Taiwan manufacturer Foxconn Technology Group, which makes smartphones for Apple: as contractors for a technology firm.

One token of that is the appearance of auto executives on turf usually associated with the tech industry such as the CES electronics show in Las Vegas. Ford CEO Mark Fields spoke at the Mobile World Congress in Barcelona about the company's plans for semi-autonomous functions such as cars that deal with traffic jams and parking, and its fully autonomous vehicle development program.

Some analysts talk about cars as a service, something you order for a few hours or day when needed, instead of something you own.

General Motors, for instance, has started an app-based car-sharing program, Maven, with 21 vehicles parked around the University of

Michigan campus in Ann Arbor, Michigan. That idea could eventually merge with vehicle autonomy.

Analyst Colin Bird from IHS Automotive said that ride-sharing services such as Uber and car-sharing such as GM's Maven or Daimler's Car2Go would "in the long term merge into one thing, a highly autonomous on demand network of cars. That's the long-term vision."

Carmakers, he said, "see that coming down the pike and they want to be involved in that, they don't want Uber, or somebody else, to take that from them."

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